

Application Number 10/572761
Response to the Office Action dated 12/28/2007

REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

The specification has been amended to include explanation of characters of drawings as supported by the specification at paras. [0003], [0005], [0038], [0090], [0107], [0117], [0121], [0141], [0168], [0214], [0218], [0239], [0240], [0255], [0272], [0287], and [0315]; and para. [0239] has been amended to include numerals as supported by Figs. 31 and 32A-32G.

Non-elected claims 21 and 32-41 have been withdrawn with traverse but should be reinstated if the generic claim is allowed.

Claim 1 has been amended to include that a phosphor is a porous light-emitting body as supported by original claim 6 and Article 19 Amendment submitted on March 21, 2006 and property of two electrodes as supported by para. [0012]; accordingly, claim 13 has been cancelled, and claims 7-11 have been amended to refer to claim 1; and claims 23 and 25 have been amended as supported by the Article 19 Amendment. Applicants respectfully note that claims 7-11 have not been cancelled and should be considered.

The drawings have been objected to under 37 CFR 1.83(a) as the drawings must show every features of the invention specified in the claims. Applicants respectfully traverse this objection.

The specification has included explanation of characters of the drawings, which indicates a location of each element. For example, a location for a ferroelectric layer is shown as a gap (9), a dielectric layer as (10), a back (side) electrode as (6), and other electrode as (70). Therefore, this objection should be withdrawn.

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Claims 1-5, 12-13, 20, 22-23, and 25-31 have been rejected under 35 U.S.C. 102(e) as being anticipated by Yano et al. (U.S. Patent No. 6,984,460). Applicants respectfully traverse this rejection.

Yano discloses a light-emitting film that comprises a matrix material containing an oxide including Mg and Ga, i.e., a positive semiconductor, (see coln. 5, lines 9-29; and coln. 9, lines 24-34) and a luminescent center (see coln. 5, lines 9-13; coln. 9, lines 35-39). When energy is applied to the light-emitting film of the reference, the energy moves from oxygen of the matrix material to the luminescent center, which emits light at high luminance (see coln. 3, lines 38-44). In contrast, claim 1 requires a porous light-emitting body in a light-emitting layer and two electrodes in a light-emitting element, and an AC electric field is applicable between the electrodes so that primary electrons are discharged in a light emitting layer; secondary electrons and ultraviolet rays are emitted; the emitted secondary electrons and ultraviolet rays excite a luminescence center of a light-emitting layer in the light-emitting element; and the porous light-emitting body emits light. The reference discloses neither the porous light-emitting body nor the electrodes that cause emission of the secondary electrons and then emission of light from the porous light-emitting body under the AC electric filed. Accordingly, claim 1 is distinguished from the reference, and thus, the rejection of claims 1-5, 12-13, 20, 22-23, and 25-31 should be withdrawn.

Claims 1-4, 12-13, 15-20, and 31 have been rejected under 35 U.S.C. 102(e) as being anticipated by Sano et al. (U.S. Patent No. 6,577,061). Applicants respectfully traverse this rejection.

Sano discloses a phosphor (38) but does not disclose that the phosphor is a porous light-emitting body as claim 1 requires (see Fig. 3; and coln. 11, line 65 - coln. 12, line 1). In addition, the reference discloses that voltage signals are applied to electrodes (see, for example, coln. 19, lines 8 to 12; and Fig. 3); so that ultraviolet light rays on the phosphor; the phosphor emits fluorescence; and the fluorescent light reflects off other phosphors and increases its intensity (see coln. 11, line 65 – coln. 12, line 1; coln. 12, lines 9-19; and Fig. 3). However, the reference does not disclose a device applying an

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AC field between two electrodes between which AC field is applicable, so that secondary electrons, in addition to ultraviolet rays, are emitted by primary electrons excited by the AC field; and the emitted secondary electrons excite a luminescence center of the porous light-emitting body; and the porous light-emitting body emits light as required in claim 1. Therefore, claim 1 is distinguished from Sano, and accordingly, the rejection of claims 1-4, 12-13, 15-20, and 31 should be withdrawn.

Claim 14 has been rejected under 35 U.S.C. 103 (a) as being unpatentable over Sano et al. (U.S. Patent No. 6,577,061). Applicants respectfully traverse this rejection.

Claim 14 is distinguished from Sano for at least the same reason as claim 1 as discussed above. Therefore, this rejection should be withdrawn. Applicants do not concede the relevance of the rejection to claim 14.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.



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